A COLLECTION OF REPTILES AND BATRACHIANS FROM ARKANSAS. INDIAN TERRITORY AND WESTERN TEXAS.

BY WITMER STONE.

During the months of March and April, 1903, Dr. Henry A. Pilsbry made a zoological reconnaissance in the Ozark Mountain region of southwestern Missouri and southern Arkansas, visiting also parts of Indian Territory and Texas, in the interests of the Academy. Among the material collected on the trip is an interesting series of reptiles and batrachians, which it has been my privilege to study and of which I herewith present a list.

While none of the forms appear to be new, the appended records are of much interest as a contribution to our knowledge of the distribution of species in a region which has been but little explored. I have also added notes on such individual variations as the specimens present, and in the case of the serpents have recorded the number of the caudals and ventrals in the largest and best preserved specimens, which may prove of value in studying the relationship of closely allied geographic races.

BATRACHIA.

Typhlomolge rathbuni Stejneger.

Six specimens from San Marcos, Hays county, Tex.

Obtained by Mr. John A. Leary from artesian wells, 152 feet deep.

Plethodon cinereus (Green).

Chadwick, Mo. (2); Roger (2), Magazine Mt. (9), Ark.

Plethodon glutinosus (Green).

Chadwick, Mo.; Blue Mt. Station (3), Magazine Mt. (3), Petit Jean Mt. (3), Ark.

Diemyctylus viridescens Raf.

Wister, I. T.

This specimen has the red lateral spots and seems to be typical viridescens.

Bufo valliceps Wieg.

San Antonio, Tex., one specimen.

Acris gryllus (Le Conte).

Hartford, Ark.; Wyandotte (2), I. T.; San Marcos (2), New Braunfels (2), Del Rio, Tex.

Hyla arenicolor Cope.

One specimen from Del Rio, Tex., which seems to be referable to this species.

Engystoma carolinense Holbrook.

One specimen from San Marcos, Tex.

Rana virescens Kalm.

High Bridge (2), New Braunfels (3), Devil's river, Tex.

REPTILIA.

Terrapene major (Agassiz).

One specimen from Devil's river, Tex.

While I have no material for comparison, this specimen agrees with Mr. Taylor's description (Pr. U. S. N. M., 1894, p. 576), and certainly can be referred to none of the others recognized in his monograph. The locality is much farther west than any recorded in Mr. Taylor's paper, the nearest point from which he had a specimen being Galveston.

Terrapene triunguis (Agassiz).

A specimen from Limestone Gap, I. T., seems to be referable to this species. Mr. Taylor (l.c., p. 581) states that "the Louisiana form seems to be a dwarf variety of this species," as noticed by Agassiz, and a series of twelve recently received from Avery's Island, La., through the kindness of Mr. E. A. McIlhenny, support this view. Inasmuch as Agassiz's type of triunguis came from Louisiana, it is the larger form that must be supplied with a name, should such a separation be deemed desirable.

The Indian Territory specimen before me is dull olive-brown, with more or less obscure yellowish radiating lines or blotches on the plates of the carapace, while the plastron is yellow mottled with small brown spots.

The Louisiana specimens vary from this same style of coloration to dark brown with small rounded bright yellow spots, arranged somewhat in radiating lines but entirely disconnected, plastron usually plain dull yellowish, sometimes with obscure transverse and radiating bands of brown; spots on the head bright yellow and reddish-orange.

The proportions of the two forms are as follows:

	Length of carapace.	Greatest width.	Height.
No. 15,607. Limestone Gap, I. T. Avery's Island, La	4.50 ins. 4.12 "	3.50 ins.	2.66 ins. 2.37 "

Kinosternon flavescens (Agassiz).

One specimen. San Antonio, Tex., of a well-marked Texan form, which Mr. Arthur Erwin Brown has identified with Agassiz's species as above.

Aromochelys odoratus (Dand.).

One example from San Marcos. Tex., which seems to be identical with the eastern species. Should it prove to be separable, Agassiz's name tristycha would apparently be available (type loc., "Osage river, Mo., and Williamson county, Tex."). The differences he points out—snout more prominent and lower jaw broader below the symphysis—while perceptible in the present specimen, are not sufficient for separation without the examination of more material.

Crotophytus collaris (Say).

One specimen each from San Marcos and Devil's river, Tex., and two from South McAlester, I. T.

None of these have two rows of interoculars.

Holbrookia texana (Troschel).

One example from Devil's river, Tex.

Sceloporus undulatus (Latreille).

Specimens from the following localities: Chadwick, Mo.; Magazine Mt. and Petit Jean Mt., Ark.: Wister, Limestone Gap and Sugar Loaf Mt., I. T.

These have the head scales smooth and color as in eastern examples, though a specimen from Wister shows some approach to the next.

Sceloporus undulatus consobrinus (Bd. and Girard).

Two from San Marcos, Tex., much lighter than the preceding, with the spots on the back shorter and brighter.

Sceloporus couchii Baird.

One specimen of this interesting species from Devil's river, Tex. Although Cope does not record this species from within the boundaries of the United States, Boulanger obtained one from Duval county, Tex.

The specimen secured by Dr. Pilsbry seems to be perfectly typical.

Phrynosoma cornutum (Harlan).

Three examples from Del Rio, Tex., and one from Devil's river.

The occipital spines are more nearly perpendicular and the ventrals more carinated than specimens from Alamogordo, N. M.

Cnemidophorus gularis Bd. and Girard.

One specimen from San Marcos, Tex., is true gularis in scale pattern, but the spots are fewer and restricted to the dark areas between the

lines, presenting a somewhat different appearance from those recently described from Alamogordo, N. $M.^1$

Liolepisma laterale (Say).

Obtained from Poteau and Petit Jean Mt., Ark.; Sugar Loaf Mt.. Wyandotte and Limestone Gap, I. T., and New Braunfels, Tex.

Eumeces quinquelineatus (Linn.).

A large series representing all age variations from Chadwick, Mo.: Petit Jean Mt., Magazine Mt., Blue Mt. Station, Ark.; South McAlester, Limestone Gap, Sugar Loaf Mt., Wyandotte and Wister, I. T.

Thamnophis proxima (Say).

Collectéd at High Bridge, Pecos river; New Braunfels and Devil's river, Tex.

The New Braunfels specimen has the dorsal stripe deep red.

Ventrals 165, 167, 174. Caudals 84, 95.

Natrix sipedon transversa (Hallowell).

Four specimens from Devil's river and one from Honda, Tex. If this and other races of water snakes are to be considered subspecies of one group, *sipedon* must be used as the specific name, as already adopted by Mr. A. E. Brown, as it occurs in the tenth edition of Linnæus, while *fasciatus* does not appear until the twelfth.

Only the young specimens seem to have the transverse spots well marked.

Ventrals 145 (2), 147 (2), 153. Caudals 69, 71, 79, 82, 83.

Natrix sp.

One very young specimen from Uinta, I. T., seems to differ from N. s. transversa. Nearly uniform brown above with an obscure light dorsal stripe, plain whitish below. Ventrals 130. Caudals 45.

Salvadora grahamiæ Bd. and Girard.

One specimen from New Braunfels, Tex. Ventrals 180. Caudals 89.

Diadophis arnyi Kennicott.

Ten specimens from Chadwick, Mo.; Magazine Mt., Ark., and Sugar Loaf Mt., I. T.

This series is quite uniform in color and pattern and the first row of scales is blue-gray in all. It seems very questionable whether this is identical with the collarless *D. regalis* of Chihuahua, and until we know more of the Mexican representatives of the genus it will be best to use Kennicott's name, which was based upon a specimen from Hyatt,

¹ Proc. A. N. S., Phila, 1902, p.132.

Kans. The *Diadophis* from Hennessy, Okla., obtained by Prof. Cope in 1893, are all *D. amabilis docilis* (Bd. and Girard). Ventrals (Arkansas specimens) 156, 158, 167. Caudals 43, 49, 49.

Lampropeltis doliatus coccineus (Schlegel).

Petit Jean Mt., Ark.; Limestone Gap (2), South McAlester, I. T. Ventrals 189, 193, 194, 196. Caudals 45, 46, 49, 49.

Lampropeltis getulus sayi (llolbrook).

Sugar Loaf Mt., I. T.

Ventrals 110. Caudals 51.

Carphophiops vermis Kennicott.

Chadwick, Mo.; Magazine Mt., Roger, Poteau and Blue Mt. Station (2), Ark., and Wister, I. T.

All bright salmon below posteriorly; paler anteriorly. Ventrals 130, 130, 137, 137. Caudals 34, 34, 26, 27.

Virginia elegans Kennicott.

One specimen, Roger, Ark.

Ventrals 116. Caudals 40.

Tantilla gracilis Bd. and Girard.

Blue Mt. Station, Hartford (2), Ark.; South McAlester (5), Sugar Loaf Mt. (2), Limestone Gap (4), Wister, I. T., and New Braunfels, Tex.

Two of the largest have ventrals 117, 129; caudals 52, 41.

Agkistrodon contortrix (Linn.).

Sugar Loaf Mt. and Limestone Gap (2), I. T. Ventrals 149, 150, 147. Caudals 42, 48, 45.

Crotalus horridus Linn.

Magazine Mt. and Petit Jean Mt., Ark.

Ventrals 173. Caudals 26.

Much lighter and more brightly marked than the average eastern specimens.